



## Installation Instructions

**D660-0090 & D660-0090-BLK**

**F95 X5M**

**AXLE BACK EXHAUST SYSTEM**

**Document Revision: B**

**Release Date: 02/17/2023**

Thank you for being selective enough to choose a Dinan Performance Exhaust System. The Dinan Engineering Team has spent many hours developing this product to assure that you will receive maximum benefits for a more aggressive sounding system, increased performance, durability and an aesthetic design that you as a customer will be able to enjoy for many years. Ease of installation and maintenance is important to us and has been highly considered throughout the design process.

Prior to performing the installation, familiarize yourself with these instructions as it should help you with the process. If you feel that you do not have the required skills or tools, please arrange for a qualified repair facility to perform the installation.

If you have any difficulties during the installation, or if these instructions are not clear to you, please call Dinan's Technical Support Staff at (800) 341-5480.

Again, thank you for choosing Dinan. Enjoy.

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## PARTS LIST

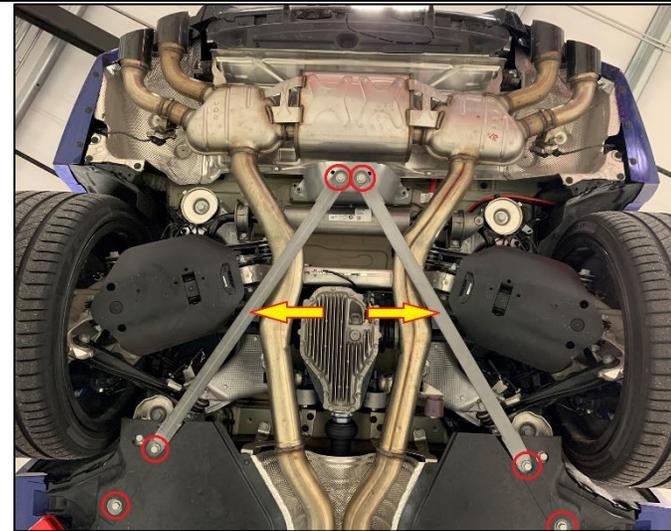
### Box Contents

Dinan Part Number	Description	QTY
D662-0657	Assy, Rear Muffler	1
D662-0658	Assy, Right Tube	1
D662-0659	Assy, Left Tube	1
D663-0362	Hardware Kit	1
D663-0643 OR	Exhaust Tips, Polished OR	4
D663-0644	Exhaust Tips, Black	4

### Kit Contents

Dinan Part Number	Description	QTY
D662-0663	Torsion strut spacer	1
07-14-7-203-503	Bolt, M12	2
D662-9248	Single wide clamp	6
D662-9245	Double wide clamp	2
D662-0433	Valve mount	2
D662-0665	D76 limiter	2
M6 WAVE	M6 wave washer	6
M6 FLAT	M6 flat washer	18
D671-0189	M6 locknut	6
D671-0193	M6x20 socket head	6
D671-0377	M6x12 button head	4
D671-0378	M6x16 button head	2

## REMOVAL OF STOCK SYSTEM

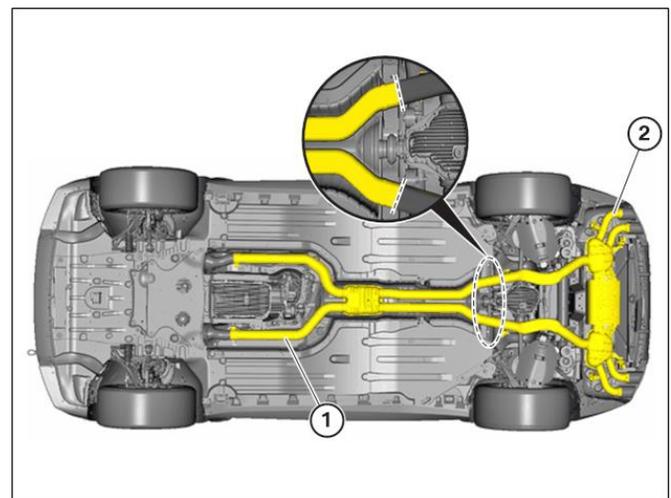


### STEP 1:

Loosen bolts (red circle) on both left and right tension strut bars

Remove left and right tension strut bars

Installer may need to loosen or remove undertray to access strut bar

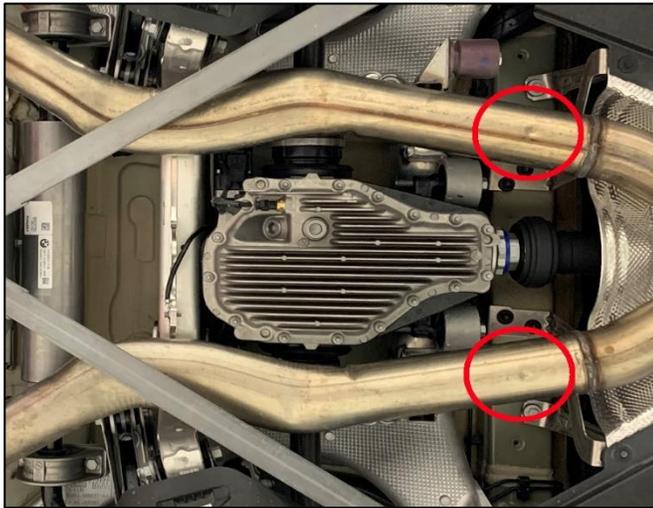


### STEP 2:

The following steps include removal of the rear silencer (2)

The front silencer (1) will remain on the vehicle

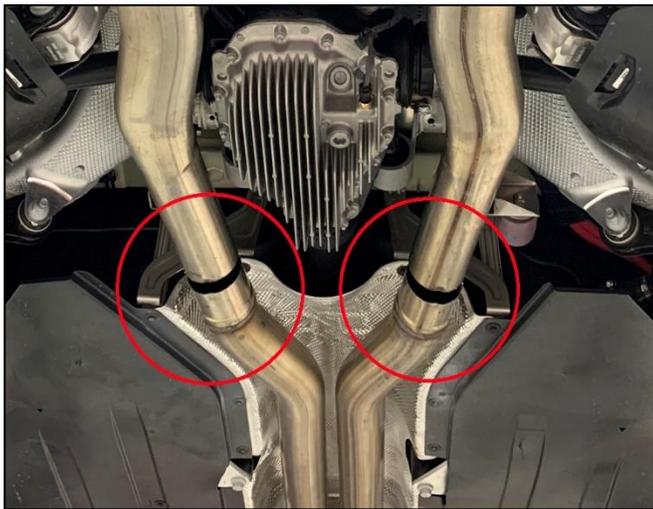
If both the Dinan Axle back (D660-0090) and Dinan Mid Pipe (D660-0091) are to be installed at the same time, the entire system can be removed at once from the front of the vehicle.

**STEP 3:**

Locate the separation point. This is in the location as shown in Step 2

This point shall be marked by a punch mark in the pipe (red circles)

Protect the rear silencer from falling

**STEP 4:**

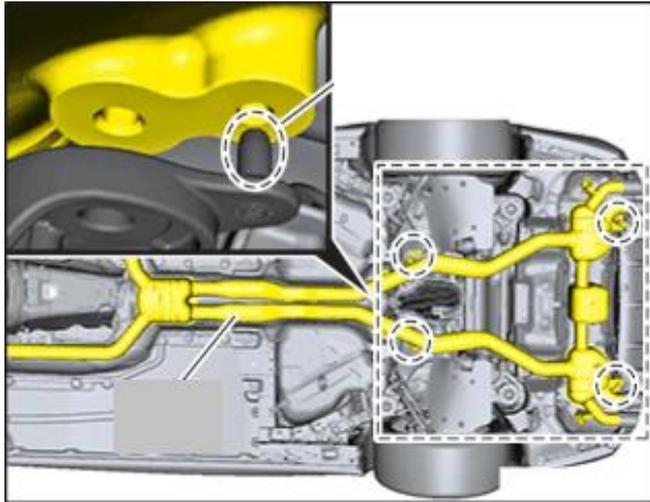
Cut through exhaust pipes at the marked point with a suitable tool

Ensure the cuts are perpendicular to the pipes

**STEP 5:**

Unlock connectors on both passenger and driver side of exhaust

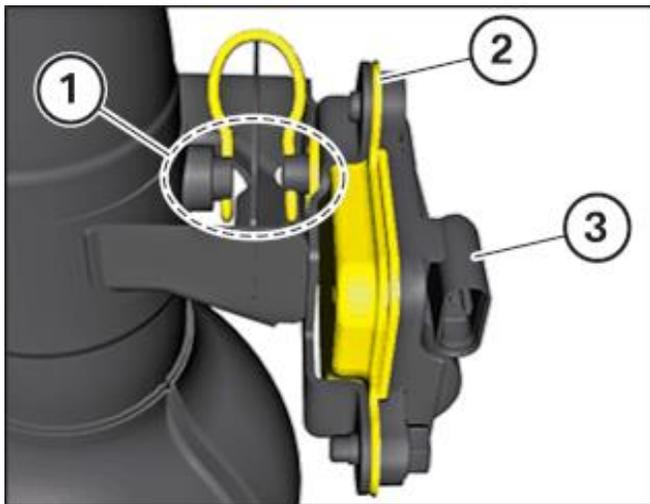
Disconnect the connectors from the exhaust motors

**STEP 6:**

Use a jack to secure the rear silencer from falling

Loosen and remove the nuts (4x) at the rubber hanger mount locations as shown

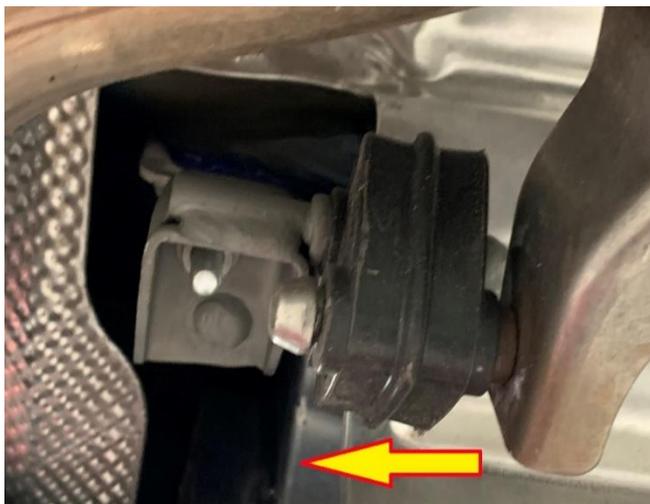
Remove the nuts (4x) and carefully lower the rear silencer section

**STEP 7:**

Loosen and remove the screws holding on the actuator motor

Remove the spring (1), actuator heat shield (2) and actuator motor (3) from both sides of silencer

These parts will be reused

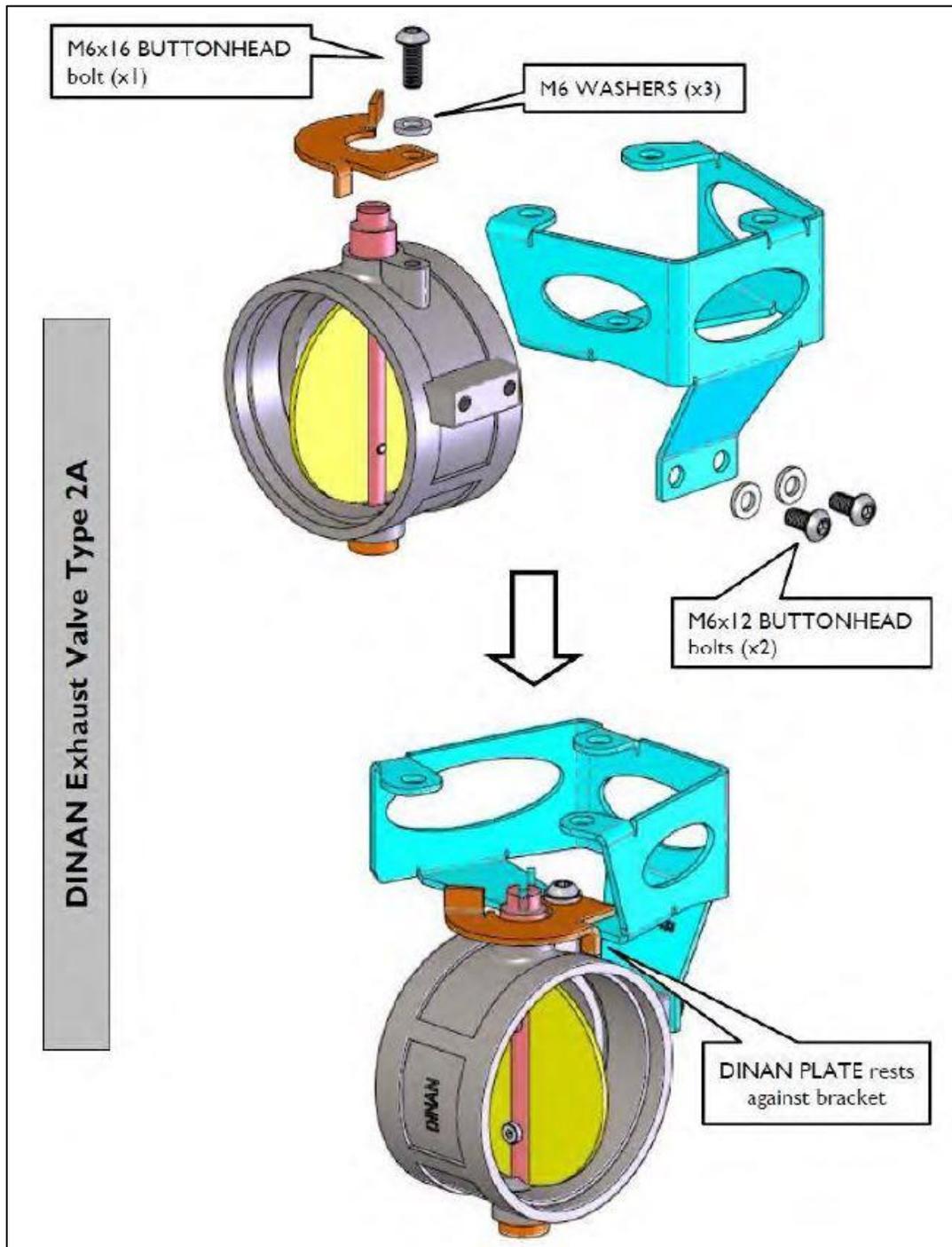
**STEP 8:**

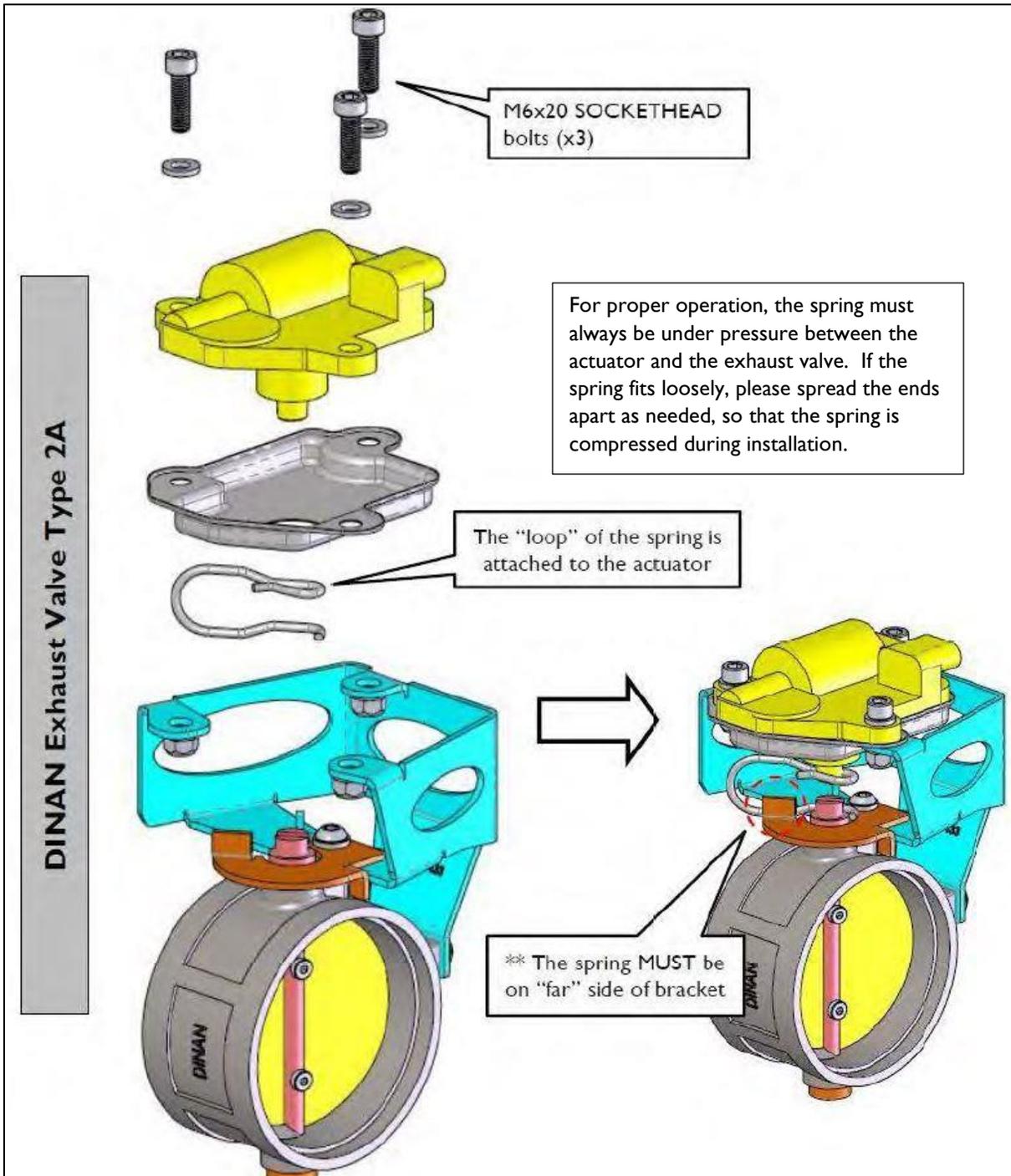
Remove the 4 rubber hanger mounts from the stock silencer

It is recommended that each one is immediately transferred to the Dinan exhaust system to ensure proper location and orientation

## VALVE-ACTUATOR INSTALLATION

Following the diagrams below, attach the actuators, brackets, and springs to the Dinan exhaust valves using the provided hardware.





## DINAN EXHAUST INSTALLATION



### STEP 1:

As noted in the final removal step:

Slide all rubber hangers onto the Dinan Exhaust system in the proper orientation.

There are 4 total:

- 1 for each inlet tube
- 2 for the axle back muffler section



### STEP 2:

Slide the double wide clamps onto the stock mid-section pipes.

**STEP 3:**

Slide the left and right inlet tube into the double wide clamps. Do not tighten in this step.

Image shows passenger side, repeat for driver side.

Properly seat hangers and secure to vehicle for both pipes.

**STEP 4:**

Once hanger plates are tightened to vehicle, adjust pipe so the rubber hanger is angled towards the front of the vehicle as shown.

Repeat for both sides.

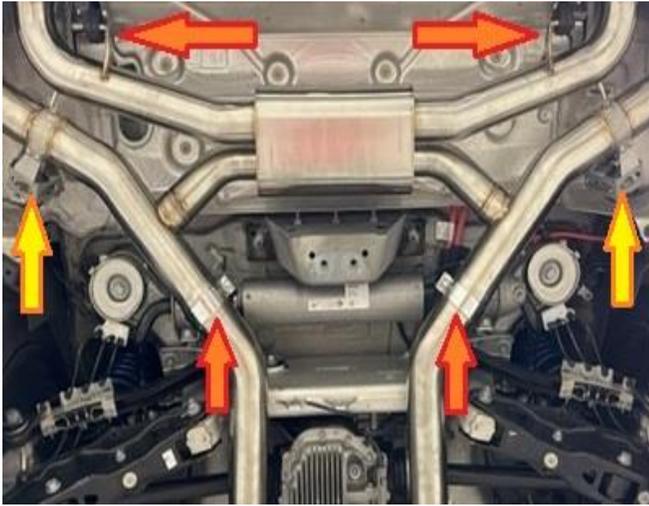
Only snug tight the clamps, as adjustment in the pipes may be needed to properly align the muffler assembly section.

**STEP 5:**

Place single wide clamps onto the muffler assembly front pipes, 2 sides.

While holding muffler assembly in place, slide pipes onto the previously installed inlet pipes.

Do not tighten in this step.



**STEP 6:**

Tubes shall be seated.

Secure hangers to vehicle.

Do not tighten clamps as adjustment is needed.

Plug in wiring harness to motor, both sides.



**STEP 7:**

Place remaining clamps on the 4 tips.

Slide the tips onto the outlet pipes and snug fit but allow for proper alignment.

It is recommended to offset tips approx. 1 inch as shown.

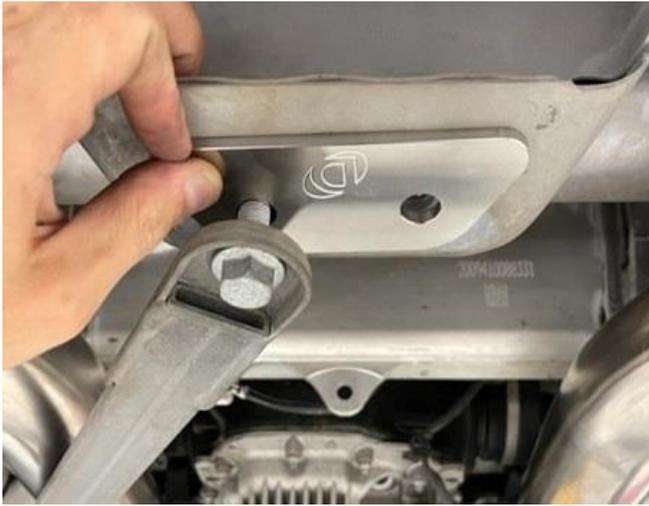


**STEP 8:**

Ensure DINAN logo is pointing up and tips are parallel to each other.

**\*\* Understand that system may not be seating in perfectly at this time. This is where the adjustment will come into play for final fitment.**

Tighten clamps of tips once desired positioning of tips is achieved.



**STEP 9:**

Add the brace spacer and re-install braces.

Use new bolt supplied in kit.



**STEP 10:**

Tighten braces and make sure the under panel is secured properly to the vehicle.



**STEP 11:**

As we are about to adjust the system for proper alignment, there shall be a gap between the pipes and braces, approximately as shown.



**STEP 12:**

Notice how the tips sit and are positioned in the vehicle. If 1 side is higher than the other, rotation of inlet tube will help level out the tips.

Have 1 person push the exhaust system towards the front of the car and also upward. This may press the tips into the bumper slightly.

Tighten all 4 clamps and let system rest.

**ALL HANGERS SHALL BE ANGLED TOWARDS THE FRONT OF THE AS SHOWN.**



**FINAL STEP AND CHECK:**

1. ENSURE PROPER POSITION OF EXHAUST TIPS
2. ENSURE ALL PIPES HAVE CLEARANCE
3. ENSURE MOTORS ARE PLUGGED INTO WIRE HARNESS
4. ADJUSTMENT MAY BE NEEDED ON TIPS AND SYSTEM IF DESIRED PLACEMENT IS NOT TO YOUR LIKING.

ENJOY

**INITIAL DRIVING**

The material inside the muffler may smell and/or put out some white smoke during your initial drive.

This is normal and will not occur again once the muffler gets fully hot and the system gets settled in.

Enjoy the additional rowdiness.